

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Axel Hertwig et al.  
Application No. : 09/640,729  
Filed : August 17, 2000  
For : MULTIPROCESSOR SYSTEM

Examiner : Raymond Ngan Phan  
Art Unit : 2111  
Docket No. : 853563.424  
Date : December 11, 2008

Mail Stop Petition  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

REQUEST FOR CONSIDERATION OF PREVIOUSLY SUBMITTED PETITION

Commissioner for Patents:

A Petition to Revive was filed by facsimile on March 30, 2004. The petition was filed in response to the discovery that the USPTO had unintentionally lost the application file, and had failed to enter a Response after a Final Rejection into the record.

Accompanying the Petition to Revive was a Request for Continued Examination, and a fee transmittal. An Auto-Reply Facsimile Transmission receipt was generated by the USPTO, indicating that the above documents were received by the Office. However, it has also been discovered that the USPTO did not enter these documents into the record.

Attached herewith is a copy of the documents as previously submitted, a copy of the Auto-Reply Facsimile Transmission receipt received from the USPTO on March 30, 2004, and a fee transmittal.

<b>REVOCATION OF POWER OF ATTORNEY WITH NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS</b>	Application Number	09/640,729
	Filing Date	August 17, 2000
	First Named Inventor	Axel Hertwig
	Art Unit	2751
	Examiner Name	Raymond Ngan Phan
	Attorney Docket Number	853583.424

I hereby revoke all previous powers of attorney given in the above-identified application.

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint the practitioners at Seed IP Law Group PLLC, Customer Number: **38106**

☒ Please change the correspondence address for the above-identified application to:

☒ The address associated with Customer Number **38106**

OR

<input type="checkbox"/> Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

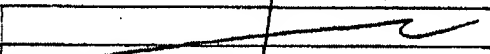
I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

☒ As assignee of record of the entire interest I/we hereby elect, under 37 CFR 3.71,  
to prosecute the application to the exclusion of the inventor(s).

**SIGNATURE of Applicant or Assignee of Record**

Signature		Date	December 1, 2008
Name	Dr. Johan van der Veer		
Title and Company (Assignee)	Senior Director - Head IP Administrator NXP B.V.		

**NOTE:** Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ \*Total of \_\_\_\_ forms are submitted.

SEND TO: Commissioner for Patents, P.O. Box 1460, Alexandria, VA 22313-1460.

1281851\_1.DOC

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Axel Hertwig et al.

Application No./Patent No.: 09/640,729 Filed/Issue Date: August 17, 2000

Entitled: MEMORY SHARING ARRANGEMENT FOR AN INTEGRATED  
MULTIPROCESSOR SYSTEM

NXP B.V.

(Name of Assignee)

a

corporation

(Type of Assignee, e.g., corporation, partnership,  
university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
(The extent (by percentage) of its ownership interest is \_\_\_\_\_%)

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above.  
The assignment was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the  
current assignee as follows:

1. From: Axel Hertwig et al.

To: U.S. Phillips Corporation

The document was recorded in the United States Patent and Trademark Office at  
Reel 011199, Frame 0579, or for which a copy thereof is attached.

2. From: U.S. Phillips Corporation

To: NXP B.V.

The document was recorded in the United States Patent and Trademark Office at  
Reel 020548, Frame 0434, or for which a copy thereof is attached.

3. From: \_\_\_\_\_

To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the  
original owner to the assignee was, or concurrently is being, submitted for recordation  
pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment  
Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP  
302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Signature

December 1, 2008  
Date

Dr. Johan van der Veer

Typed or printed name

Senior Director - Head IP Administrator

Title

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	4375312
<b>Application Number:</b>	09640729
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	4820
<b>Title of Invention:</b>	Memory sharing arrangement for an integrated multiprocessor system
<b>First Named Inventor/Applicant Name:</b>	Axel Hertwig
<b>Customer Number:</b>	65913
<b>Filer:</b>	Robert Iannucci/Vineta Jackson
<b>Filer Authorized By:</b>	Robert Iannucci
<b>Attorney Docket Number:</b>	PHD-99.107
<b>Receipt Date:</b>	02-DEC-2008
<b>Filing Date:</b>	17-AUG-2000
<b>Time Stamp:</b>	17:17:18
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
------------------------	----

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		424_POA.pdf	184455 d7b35680b804f695ceadfd539b0e8bbadd 4d669	yes	2

	Multipart Description/PDF files in .zip description		
	Document Description	Start	End
	Power of Attorney	1	1
	Assignee showing of ownership per 37 CFR 3.73(b).	2	2
<b>Warnings:</b>			
<b>Information:</b>			
Total Files Size (in bytes):		184455	
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b>  If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b>  If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b>  If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>			

**PETITION FEE  
Under 37 CFR 1.17(m)  
TRANSMITTAL**

(Fees are subject to annual revision)

Send completed form to: Commissioner for Patents  
P.O. Box 1450, Alexandria, VA 22313-1450

Application Number	09/640,729
Filing Date	August 17, 2000
First Named Inventor	Axel Hertwig
Art Unit	2111
Examiner Name	Raymond Ngan Phan
Attorney Docket Number	853563.424

**Enclosed is a petition filed under 37 CFR § 1.17(m) that requires a processing fee. Payment of \$1620 is enclosed.**

This form should be included with the above-mentioned petition and faxed or mailed to the Office using the appropriate Mail Stop (e.g., Mail Stop Petition), if applicable. For transmittal of processing fees under 37 CFR 1.17(i), see form PTO/SB/17i.

**Payment of Fees** (small entity amounts are NOT available for the petition fees)

- ☒ The Commissioner is hereby authorized to charge the following fees to Deposit Account No. 19-1090:
- ☐ petition fee under 37 CFR 1.17(f), (g) or (h) ☒ any deficiency of fees and credit of any overpayments
- ☐ Check in the amount of \$\_\_\_\_\_ is enclosed.
- ☐ Payment by credit card (Form PTO-2038 or equivalent enclosed). Do not provide credit card information on this form.

**Petition Fees under 37 CFR 1.17(f): Fee \$400 Fee Code 1462**

For petitions filed under:

- § 1.36(a) for revocation of a power of attorney by fewer than all applicants.  
§ 1.53(e) – to accord a filing date.  
§ 1.57(a) – to accord a filing date.  
§ 1.182 – for decision on a question not specifically provided for.  
§ 1.183 – to suspend the rules.  
§ 1.378(e) – for reconsideration of decision on petition refusing to accept delayed payment of maintenance fee in an expired patent.  
§ 1.741(b) – to accord a filing date to an application under § 1.740 for extension of a patent term.

**Petition Fees under 37 CFR 1.17(g): Fee \$200 Fee Code 1463**

For petitions filed under:

- § 1.12 – for access to an assignment record.  
§ 1.14 – for access to an application.  
§ 1.47 – for filing by other than all the inventors or a person not the inventor.  
§ 1.59 – for expungement of information.  
§ 1.103(a) – to suspend action in an application.  
§ 1.136(b) – for review of a request for extension of time when the provisions of section 1.136(a) are not available.  
§ 1.295 – for review of refusal to publish a statutory invention registration.  
§ 1.296 – to withdraw a request for publication of a statutory invention registration filed on or after the date the notice of intent to publish issued.  
§ 1.377 – for review of decision refusing to accept and record payment of a maintenance fee filed prior to expiration of a patent.  
§ 1.550(c) – for patent owner requests for extension of time in ex parte reexamination proceedings.  
§ 1.956 – for patent owner requests for extension of time in inter partes reexamination proceedings.  
§ 5.12 – for expedited handling of a foreign filing license.  
§ 5.15 – for changing the scope of a license.  
§ 5.25 – for retroactive license.

**Petition Fees under 37 CFR 1.17(h): Fee \$130 Fee Code 1464**

For petitions filed under:

- § 1.19(g) – to request documents in a form other than that provided in this part.  
§ 1.84 – for accepting color drawings or photographs.  
§ 1.91 – for entry of a model or exhibit.  
§ 1.102(d) – to make an application special.  
§ 1.138(c) – to expressly abandon an application to avoid publication.  
§ 1.313 – to withdraw an application from issue.  
§ 1.314 – to defer issuance of a patent.

/Robert Iannucci/

Signature

Robert Iannucci

Typed or printed name

December 11, 2008

Date

33,514

Registration No., if applicable

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Axel Hertwig et al.  
Application No. : 09/640,729  
Filed : August 17, 2000  
For : MULTIPROCESSOR SYSTEM

Examiner : Raymond Ngan Phan  
Art Unit : 2111  
Docket No. : 853563.424  
Date : December 11, 2008

Mail Stop Petition  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

FEE DEFICIENCY AUTHORIZATION FORM

Commissioner for Patents:

Applicants hereby authorize the Director to charge any deficiencies in fees due by way of the enclosed papers only under 37 CFR 1.16 and 1.17 to Deposit Account No. 19-1090.

Respectfully submitted,

SEED Intellectual Property Law Group PLLC

/Robert Iannucci/

Robert Iannucci

Registration No. 33,514

701 Fifth Avenue, Suite 5400  
Seattle, Washington 98104  
Phone: (206) 622-4900  
Fax: (206) 682-6031

1293829\_1.DOC

**TO:** Fax Sender at 4084749081

**Fax Information**  
**Date Received:** 3/30/2004 8:47:20 PM [Eastern Standard Time]  
**Total Pages:** 4 (including cover pag

**ADVISORY:** This is an automatically generated return receipt confirmation of the facsimile transmission received by the Office. Please check to make sure that the number of pages listed as received in Total Pages above matches what was intended to be sent. Applicants are advised to retain this receipt in the unlikely event that proof of this facsimile transmission is necessary. Applicants are also advised to use the certificate of facsimile transmission procedures set forth in 37 CFR 1.8(a) and (b), 37 CFR 1.6(f). Trademark Applicants, also see the Trademark Manual of Examining Procedure (TMEP) section 306 et seq.

Received  
Cover  
Page

88/04/2003 06:40 FAX 4084740081 0001

**ST/ST** MAR 27 2004  
**ST/ST** MAR 31 2004

FACSIMILE TRANSMISSION TO  
THE UNITED STATES PATENT AND TRADEMARK OFFICE

DATE: 3/30/2004

RE: Serial No.: 02/640,729  
Dock# No.: 099107

TO: Examiner: A. Heitwig  
Art Unit: 2181  
Fax Number: (703) 872-9306

FROM: Michael E. Schmitt, Reg. No. 36,921  
Telephone: (408) 474-9065

TRANSMISSION INCLUDES: 4 Pages (including cover sheet)  
Request for Continued Examination (RCE) Transmittal  
Request for Reconstruction of Lost File, Petition to Revoke - 2 pages

NOTIFICATION OF TRANSMISSION UNDER 37 CFR 1.8  
I hereby certify that this correspondence is being furnished to the Patent and Trademark  
Office at the number listed above  
on 3/30/04 by *Shannon L. Lister*  
Shannon Lister

PHILIPS ELECTRONICS NORTH AMERICA CORPORATION  
Intellectual Property & Standards  
1109 McKay Drive MS-413J  
San Jose, California 95131  
Fax Number: (408) 474-9082



FACSIMILE TRANSMISSION TO  
THE UNITED STATES PATENT AND TRADEMARK OFFICE

DATE: 3/30/2004

RE: Serial No.: 09/640,729

Docket No.: D99107

TO: Examiner: A. Hertwig

Art Unit: 2181

Fax Number: (703) 872-9306

FROM: Michael E. Schmitt, Reg. No. 36,921

Telephone: (408) 474 - 9065

TRANSMISSION INCLUDES: 4 Pages (including cover sheet)

Request for Continued Examination (RCE) Transmittal

Request for Reconstruction of Lost File... Petition to Revive - 2 pages

<b>CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8</b>	
I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office at the number listed above	
on 3/30/04	by Shannon Lester

PHILIPS ELECTRONICS NORTH AMERICA CORPORATION  
Intellectual Property & Standards  
1109 McKay Drive M/S-41SJ  
San Jose, California 95131  
Fax Number: (408) 474-9082

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First-Named Inventor: Hertwig, A.

Application No.: 09/640729 Conf.: 4820

Date Filed: 08/17/2000

Docket No.: D99107

Art Unit: 2181

Examiner: R. Phan

Title: MEMORY SHARING ARRANGEMENT FOR AN INTEGRATED  
MULTIPROCESSOR SYSTEM

REQUEST FOR RECONSTRUCTION OF LOST FILE AND PTO ACTION RELATING TO  
APPLICANT'S RESPONSE AFTER FINAL AND  
IN THE ALTERNATIVE  
REVIVAL OF AN APPLICATION FOR PATENT  
ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)

Commissioner for Patents  
M/S Petitions  
PO Box 1450  
Arlington, VA 22313-1450

Sir:

Starting in December 2003, Applicant made various inquiries as to the status of the above case. In those inquiries, Applicant noted that a Response After Final had been filed on September 3, 2003, which date was within two months from the mailing date of the Final Office Action. As such, Applicant requested that an Advisory Action be provided by the Office.

At the end of January and the beginning of February, Applicant made another inquiry. In that inquiry, Applicant was informed that (a) Response After Final had been received, but that (b) the file was lost and (c) no Advisory Action was to be issued.

**Because of these circumstances, Applicant requests the Office to (a) order reconstruction of the file, provided the file continues to be lost, (b) withdraw abandonment of the application, if the application is currently deemed to be abandoned, and (c) issue an appropriate Action relating to the Response After Final, including a period for reply appropriate to such Action.**

IN THE ALTERNATIVE TO THE ABOVE

**If the Office cannot grant the above request in full, and provided that the application is currently abandoned, Applicant petitions for revival of the application under 37 CFR 1.137(b) for unintentional abandonment.**

Application No. 09/640,729

Applicants request that the original Response after Final Rejection, Petition to Revive, and Request for Continued Examination be entered into the record, and the application be re-opened for prosecution.

Respectfully submitted,

SEED Intellectual Property Law Group PLLC

/Robert Iannucci/

Robert Iannucci

Registration No. 33,514

RXI:trl

Enclosures:

Petition to Revive, RCE, and fee transmittal as filed on 03/30/04  
Fee Transmittal

701 Fifth Avenue, Suite 5400  
Seattle, Washington 98104  
Phone: (206) 622-4900  
Fax: (206) 682-6031

1292808\_1.DOC

<b>REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL</b> Address to: Mail Stop RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number	09/640729
	Filing Date	8/17/2000
	First Named Inventor	Hertwig, A.
	Group Art Unit	2181
	Examiner Name	R. Phan
	Attorney Docket Number	D99107

This is a Request for Continued Examination (RCE) under 37 CFR §1.114 of the above-identified application. RCE practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application.

**1. Submission required under 37 C.F.R. § 1.114**

- a. ☒ Previously submitted
- i. ☒ Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on 9/3/2003  
*(Any unentered amendment(s) referred to above will be entered)*
- ii. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_
- iii. ☐ Other \_\_\_\_\_
- b. ☐ Enclosed:
- i. ☐ Amendment/Reply
- ii. ☐ Affidavit(s)/Declaration(s)
- iii. ☐ Information Disclosure Statement (IDS)
- iv. ☐ Other \_\_\_\_\_ *(may not be a brief)*


**2. Miscellaneous**

- a. ☐ Suspension of action on the above-identified application is requested under 37 C.F.R. §1.103(c) for a period of \_\_\_\_\_ months. *(May not exceed 3 months; Fee required per 37 C.F.R. § 1.117(l))*
- b. ☐ Other \_\_\_\_\_

**3. Fees** The RCE fee under 37 CFR §1.17(e) is required by 37 CFR §1.114 when the RCE is filed.

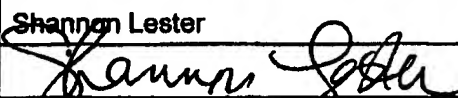
- a. ☒ The Commissioner For Patents is hereby authorized to charge all required fees except the issue fee or credit any overpayments, to Deposit Account No. 14-1270.

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

Name (Print Type)	Michael E. Schmitt, Reg. No. 36,921		
Signature		Date	3/30/04

**CERTIFICATE OF MAILING OR TRANSMISSION**

I hereby certify that this is being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office tel#: 703 872-9306 on the date below:

Name (Print Type)	Shannon Lester		
Signature		Date	3/30/04

In support of the petition to revive, Applicant submits:

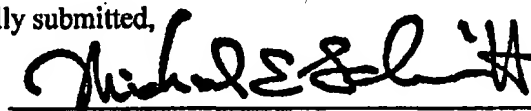
1. PETITION FEE UNDER 37 CFR §1.17(m):  
☒ Please charge the petition fee to Deposit Account 14-1270.
2. REPLY AND/OR FEE:  
☒ The reply and/or fee to the above-noted Office Action:  
☒ has been filed previously on September 3, 2003.  
☒ is enclosed herewith.
3. TERMINAL DISCLAIMER WITH DISCLAIMER FEE:  
☒ Since this application was filed after June 8, 1995, no terminal disclaimer is required.
4. STATEMENT:  
☒ The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional.

Due to the circumstances under which the application came to be abandoned, Applicant requests that, if this petition to revive is deemed necessary and is granted, the petition be granted without fee. However, if the petition is determined to require a fee that cannot be waived, please charge any fees which may be required in connection with this petition, or credit any overpayment, to Deposit Account No. 14-1270.

Date: March 29, 2004

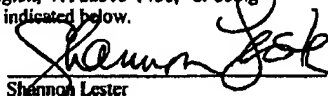
Respectfully submitted,

By



Michael E. Schmitt, Reg. No. 36,921  
Philips Electronics North America Corp.  
1109 McKay Drive, M/S-41SJ, San Jose, CA 95131  
(408) 474-9065

Enclosures: ☒ Fee Payment  
☐ Reply  
☐ Terminal Disclaimer Form  
☐ Additional sheets containing statements establishing unintentional delay  
☒ Other: RCE

CERTIFICATE OF MAILING or TRANSMISSION	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to "Commissioner for Patents, PO Box 1450, Arlington, VA 22313-1450," or being facsimile transmitted to the USPTO, on the date indicated below.	
(Date) <u>3/30/04</u>	(Signature)  (Name) <u>Shannon Lester</u>

## FACSIMILE COVER SHEET

NL

To: **Examiner** Raymond N. Phan  
**Art Unit** 2181

Fax No: 703.746.7238

Date: September 03, 2003

From: Raymond J. Werner  
2092 NW Alcock Drive  
Suite 525  
Hillsboro, Oregon 97124  
503.466.2294 (voice)  
503.466.2715 (fax)

Number of pages (including this page): 8

Confirmation copy to follow: Yes\_\_\_\_ No\_\_X\_\_

COVER MESSAGE:

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Axel Hertwig, et al.	:	
Appl. No.	:	09/640,729	:	Grp./Art Unit : 2181
Filed	:	17 August 2000	:	Examiner : R. Phan
Title	:	Memory Sharing Arrangement For An Integrated Multiprocessor System	:	
Docket No.	:	PHD 99107	:	

Documents faxed in the above-referenced application:

- 1 - Certificate of Transmission by Facsimile (1 page),
- 2 - Reply After Final Office Action (5 pages), and
- 3 - Change of Correspondence Address (1 page).

THIS TRANSMISSION IS INTENDED ONLY FOR THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED. IT MAY CONTAIN PRIVILEGED, CONFIDENTIAL ATTORNEY WORK PRODUCT, OR TRADE SECRET INFORMATION WHICH IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS. IF YOU ARE NOT THE INTENDED RECIPIENT, OR AN EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THIS MESSAGE TO THE INTENDED RECIPIENT AND HAVE RECEIVED THIS MESSAGE IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE.

DOCKETED

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Axel Hertwig, et al.	:	
Appl. No.	:	09/640,729	:	Grp./Art Unit : 2181
Filed	:	17 August 2000	:	Examiner: R. Phan
Title	:	Memory Sharing Arrangement	:	
		For An Integrated Multiprocessor	:	
		System	:	
Docket No.	:	PHD 99107	:	

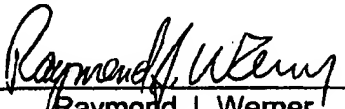
CERTIFICATE OF TRANSMISSION BY FACSIMILE  
37 CFR 1.8

Commissioner for Patents

I hereby certify that the following items:

- 1 - Certificate of Transmission by Facsimile (1 page),
- 2 - Reply After Final (5 pages), and
- 3 - Change of Correspondence Address (1 page).

are being transmitted, by facsimile to 703.746.7238 pursuant to 37 CFR 1.8 on the date indicated below, addressed to the Commissioner for Patents.

  
Raymond J. Werner

03 SEPTEMBER 2003  
Date of Transmission

Raymond J. Werner  
2092 NW Alcielek Drive  
Suite 525  
Hillsboro, Oregon 97124  
T: 503.466.2294  
F: 503.466.2715

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant	:	Axel Hertwig, et al.	:	
Appl. No.	:	09/640,729	:	Grp./Art Unit : 2181
Filed	:	17 August 2000	:	Examiner: R. Phan
Title	:	Memory Sharing Arrangement For An Integrated Multiprocessor System	:	
Docket No.	:	PHD 99107	:	

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Assistant Commissioner for Patents

**RESPONSE AFTER FINAL**

Sir:

This is in response to the Office Action of 24 July 2003. Provided below, and beginning on a separate sheet, Applicants respectfully submit arguments traversing the Claim rejections set forth in the present Office Action.



#### REMARKS

This is in response to the Office Action of 24 July 2003. Claims 17-28 are pending in the application, and Claims 17-28 have been rejected.

No new matter has been added.

In view of the remarks below, Applicants respectfully request reconsideration and further examination.

#### About The Invention

The present invention relates generally to the integration of at least two processors onto a single integrated circuit, or chip, and providing a shared memory arrangement by which each of the at least two integrated processors are able to access various memories. More particularly, the present invention relates to integrating a first and a second processor on an integrated circuit wherein the first processor accesses a first memory through at least one cache memory disposed intermediate the first memory and the first processor, and the at least one cache memory is coupled to the first memory via a first bus, and wherein the second processor is coupled to a second bus and accesses the first memory through a bridge that provides an appropriate interface between the first bus and the second bus, the busses being dissimilar. In various further aspects of the present invention, the first and second processors may operate at different clock frequencies; there may be a direct communication path between the first processor and the second processor; and there may be an additional cache memory disposed between the second processor and the second bus.

#### Title

Applicants thank the Examiner for accepting and entering the new title for this application (i.e., Memory Sharing Arrangement For An Integrated Multiprocessor System) which was submitted in the previous response.

Rejections under 35 USC 102(e)

Claims 17-28 have been rejected under 35 USC 102(e), as being anticipated by Nakagawa, et al., (US Patent 6,353,863). The Examiner states that all the limitations of all the pending claims are disclosed by Nakagawa, et al.

For at least the reasons set forth below, Applicants respectfully traverse the rejections of Claims 17-28 under 35 USC 102(e), and requests that these rejections be withdrawn.

With respect to independent Claims 17 and 25, the Examiner states that Nakagawa, et al., at Fig. 4; and at col. 8 line 32 through col. 9 line 14, disclose a first processor coupled to an instruction cache and to a data cache. Applicants respectfully assert that Nakagawa, et al., do not provide such a disclosure. In fact, Nakagawa, et al., show a CPU core 414 coupled to an internal memory 418 for the purpose of receiving instructions; and further show a DSP core 403 coupled to an internal memory X 404 for the purpose of receiving instructions (col. 8, line 67 through col. 9, line 3) and to an internal memory Y 405 (col. 8, line 67 through col. 9, line 3) for the purpose of receiving instructions. There is no showing of CPU core 414 being coupled to a data cache. Similarly, there is no showing of DSP core 403 being coupled to a data cache. All of the pending independent Claims require a first processor coupled to both an instruction cache and to a data cache. Since this limitation is not shown by Nakagawa, et al., Applicants' Claims can not be anticipated by Nakagawa, et al.

Applicants' Claims also recite the limitation of "a first bus coupled to the instruction cache and to the data cache", and further recite limitation of "a first memory coupled to the first bus". There does not appear to be any structure shown or described in Nakagawa, et al., that matches the claimed first bus that is coupled to both the instruction cache, the data cache, and the first memory. Only CPU External RAM 430, and CPU External ROM 431 appear to be suitably characterizable as a "first memory", however, neither of these is coupled as set forth in the Claims. Since this claimed structure is not shown by Nakagawa, et

al., Applicants' Claims can not be anticipated by Nakagawa, et al.

Applicants' Claims also recite the limitation of "a first bus bridge coupled to the first bus and to the second bus, the first bus bridge providing a path for transferring data between the first memory and the second processor". There does not appear to be any structure shown or described in Nakagawa, et al., that matches the recited limitation. Nakagawa, et al., show a CPU/DSP Interface 410, but this does not provide the pathway between the second processor and the first memory as recited in Applicants' Claims. Since this claimed structure is not shown by Nakagawa, et al., Applicants' Claims can not be anticipated by Nakagawa, et al.

Further Applicants' Claims recite the limitation of "a second bus bridge coupled to the second bus and a third bus, the third bus providing a data pathway within the first processor, the second bus bridge providing a path for transferring data between the second memory and the third bus of the first processor". There is no showing in Nakagawa, et al., of any such structural limitation. Applicant's Claims require that the third bus provide a data pathway within the first processor. There is not such structure, or structural equivalent shown by Nakagawa, et al. Since this claimed structure is not shown by Nakagawa, et al., Applicants' Claims can not be anticipated by Nakagawa, et al.

For at least the reasons set forth above, Applicants respectfully assert that the rejections of Claims 17-28 under 35 USC 102(e) are improper and should be withdrawn.

Applicants further submit, that Nakagawa, et al., do not provide any suggestion or motivation for the structure set forth in Applicants' Claims and therefore Applicants' Claims cannot be considered obvious in view thereof.

#### Conclusion

All of the rejections in the outstanding Office Action of 18 March 2003 have been responded to, and Applicants respectfully submit that the pending Claims 17-28 are now in condition for allowance.

Appl. No. 000000,

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

By Raymond J. Werner  
Raymond J. Werner  
Reg. No. 34,752

Dated: 03 September 2003  
Portland, Oregon



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/640,729	08/17/2000	Axel Hertwig	PHD-99.107	4820

7590 07/24/2003  
U S Philips Corporation  
580 White Plains RD  
Tarrytown, NY 10591

EXAMINER

PHAN, RAYMOND NGAN

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 07/24/2003

6 wk: 8/4/03

Please find below and/or attached an Office communication concerning this application or proceeding.

PHILIPS IP&S-SVL		
ACTION	INIT.	DATE
RECEIVED	SVL	AUG 11 2003
DOCKETED		DOCKETED ✓
COMPLETED		NL ✓
COPY NL		

SK

**Office Action Summary**

Application No.

09/640,729

Applicant(s)

HERTWIG ET AL.

Examiner

Raymond Phan

Art Unit

2181

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 May 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**Part III DETAILED ACTION**

***Notice to Applicant(s)***

1. This action is responsive to the following communications: amendment filed on May 21, 2003.
2. This application has been examined. Claims 17-28 are pending.

***Specification***

3. The title of the invention is accepted.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 17-28 are rejected under 35 U.S.C. § 102(e) as being anticipated by Nakagawa et al. (US No. 6,353,863).

In regard to claims 17, 25, Nakagawa et al. disclose an electronic product, comprising a first processor coupled to the instruction cache and to the data cache (see figure 4, col. 8, line 32 through col. 9, line 14); a first bus coupled to the instruction cache and to the data cache (see figure 4, col. 8, line 32 through col. 9,

line 14); a first memory coupled to the first bus (see figure 4, col. 8, line 32 through col. 9, line 14); a second processor coupled to the second bus (see figure 4, col. 8, line 32 through col. 9, line 14); a first bridge coupled to the first bus and to the second bus, the first bus bridge providing a path for transferring data between the first memory and the second processor (see figure 4, col. 8, line 32 through col. 9, line 14); a second memory coupled to the third bus (see figure 4, col. 8, line 32 through col. 9, line 14); a second bus bridge coupled to the second bus and the third bus (see figure 4, col. 8, line 32 through col. 9, line 14); the third bus providing data pathway within the first processor; the second bus bridge providing a path for data transferring between the second memory and the third bus of the of the first processor (see figure 4, col. 8, line 32 through col. 9, line 14); a DMA controller coupled to the second bus configured to manage the transfer of data between the second memory and the second bus bridge (see col. 8, lines 48-67); wherein the first processor is configured to operate at a first frequency, the second processor is configured to operate at the second frequency and the first frequency is greater than the second frequency (see figure 4; col. 8, lines 32-50), wherein the first bus and second bus are dissimilar (see figure 4, col. 8, line 32 through col. 9, line 14); wherein the electronic product is the mobile radiotelephony controller (see col. 9, lines 26-42).

In regard to claims 18, 28, Nakagawa et al. disclose wherein the first processor and second process are both disposed together on a single IC (see figure 6).

In regard to claim 19, Nakagawa et al. disclose wherein the first processor is the DSP 400 and the second processor is the core processor 413 (see figure 4; col. 8, lines 32-50).



In regard to claim 20, Nakagawa et al. disclose wherein the memory is connected to the first processor via two cache memories 404, 405, one used for access to the memory for reading a program and the other of which is used for access to the memory for reading out data (see figure 4).

In regard to claims 21, 23, 27, Nakagawa et al. disclose the DSP chip formed by DSP and memory has a Harvard architecture in that it includes separate X data bus 411 and Y data bus 412 (see figure 14, col. 17, lines 28-65).

In regard to claim 22, Nakagawa et al. disclose wherein the DMA controller and the second bus are both disposed on a single IC (see col. 11, line 44 through col. 12, line 14).

In regard to claims 24, 26, Nakagawa et al disclose ROM disposed on the single IC and coupled to the second bus (see figure 7).

#### ***Response to Amendment***

6. Applicant's arguments with respect to new claims 17-28 have been considered but new claims 17-28 are deemed to be moot in view of the new grounds of rejection.

#### ***Conclusion***

7. All claims are rejected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire **THREE MONTHS** from the date of this action. In the event a first response is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Raymond Phan, whose telephone number is (703) 306-2756. The examiner can normally be reached on Monday-Friday from 6:30AM- 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Primary, Paul Myers can be reached on (703) 305-9656 or via e-mail addressed to paul.myers@uspto.gov. The fax phone number for this Group is (703) 746-7239.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [raymond.phan@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

*RP*

**Raymond Phan**  
7/22/03

*Paul R. Myers*

PAUL R. MYERS  
PRIMARY EXAMINER

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	09640729			
<b>Filing Date:</b>	17-Aug-2000			
<b>Title of Invention:</b>	Memory sharing arrangement for an integrated multiprocessor system			
<b>First Named Inventor/Applicant Name:</b>	Axel Hertwig			
<b>Filer:</b>	Robert Iannucci/Tyler Livas			
<b>Attorney Docket Number:</b>	853563.424			
Filed as Large Entity				
<b>Utility under 35 USC 111(a) Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
Petition-revive unintent. abandoned appl	1453	1	1620	1620
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				1620

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	4440274
<b>Application Number:</b>	09640729
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	4820
<b>Title of Invention:</b>	Memory sharing arrangement for an integrated multiprocessor system
<b>First Named Inventor/Applicant Name:</b>	Axel Hertwig
<b>Customer Number:</b>	38106
<b>Filer:</b>	Robert Iannucci/Tyler Livas
<b>Filer Authorized By:</b>	Robert Iannucci
<b>Attorney Docket Number:</b>	853563.424
<b>Receipt Date:</b>	11-DEC-2008
<b>Filing Date:</b>	17-AUG-2000
<b>Time Stamp:</b>	17:48:54
<b>Application Type:</b>	Utility under 35 USC 111(a)

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1	Petition for review by the Office of Petitions.	424_REQUEST_FOR_CONSIDERATION_OF_PETITION.pdf	54081 55e2crlbf9b3e58ch2e5953a64ab4028032dcdc0	no	2
<b>Warnings:</b>					
<b>Information:</b>					
2	Fee Worksheet (PTO-06)	424_FEE_TRANSMITTAL_FORM.pdf	93683 d7ce0130825acd91547d95e4154c612877641e37	no	1
<b>Warnings:</b>					
<b>Information:</b>					
3	Miscellaneous Incoming Letter	424_FDA.pdf	51225 b41d2929c361baae0459c119733bdc980b53a2a4	no	1
<b>Warnings:</b>					
<b>Information:</b>					
4	Examination support document	424_PRIOR_PETITION.pdf	214583 8b6fd9c7566d498d6ee4027f6e564eae362eac139	no	5
<b>Warnings:</b>					
<b>Information:</b>					
5	Examination support document	424_PRIOR_AMEND.pdf	220046 53457f73361c53f5c8058a8cc67e09cdf9d2bb82	no	7
<b>Warnings:</b>					
<b>Information:</b>					
6	Examination support document	424_PRIOR_OFFICE_ACTION.pdf	266299 1a9301e2072ae16487a82a17bfe24a49d40d4101	no	6
<b>Warnings:</b>					
<b>Information:</b>					
7	Fee Worksheet (PTO-06)	fee-info.pdf	30086 785b2679c23fabae13df670c28e7fcd6b49535e5	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			930003		

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**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.